

## Supplementary Materials

### Facial Strategy for Preparation of Modified PVDF Membrane: Endowing Effective Separation of Oil/Water Mixtures

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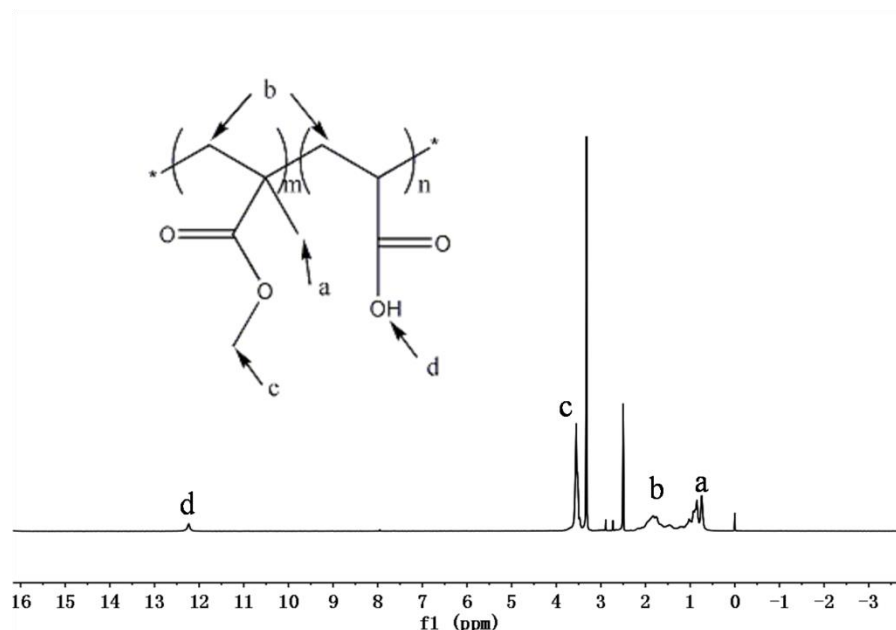


Figure S1.  $^1\text{H}$  NMR of P (MMA-AA) in  $d_6$ -DMSO.

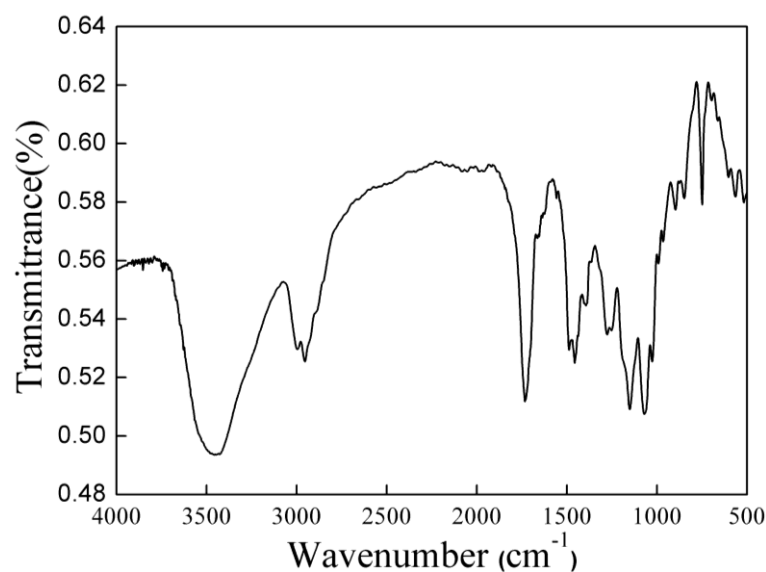
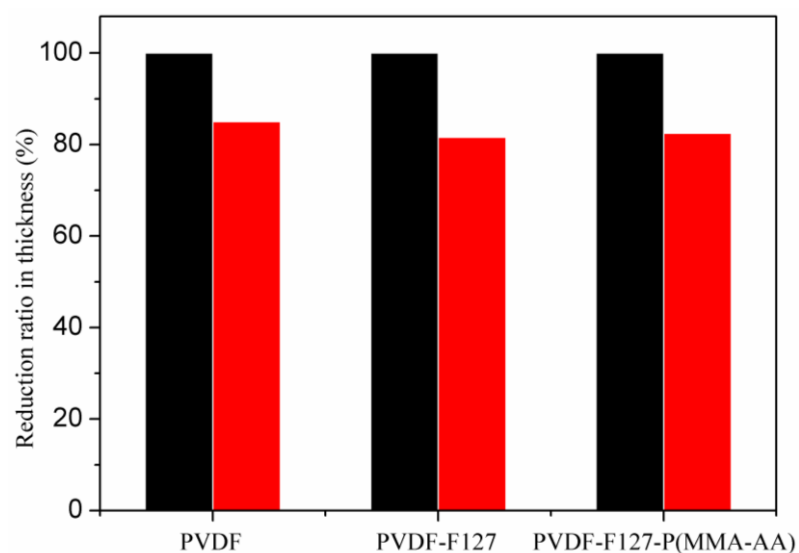
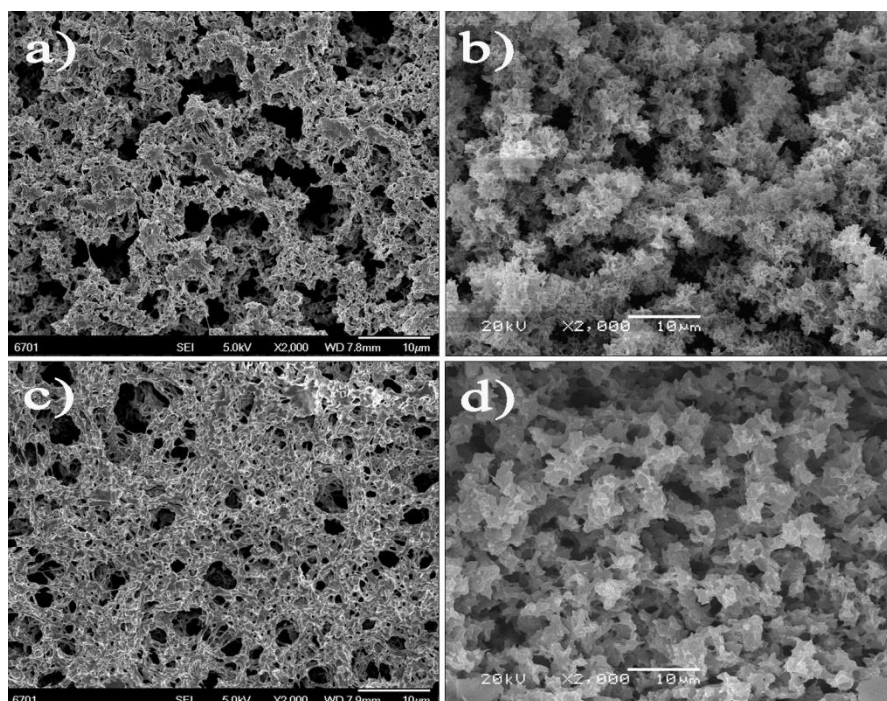


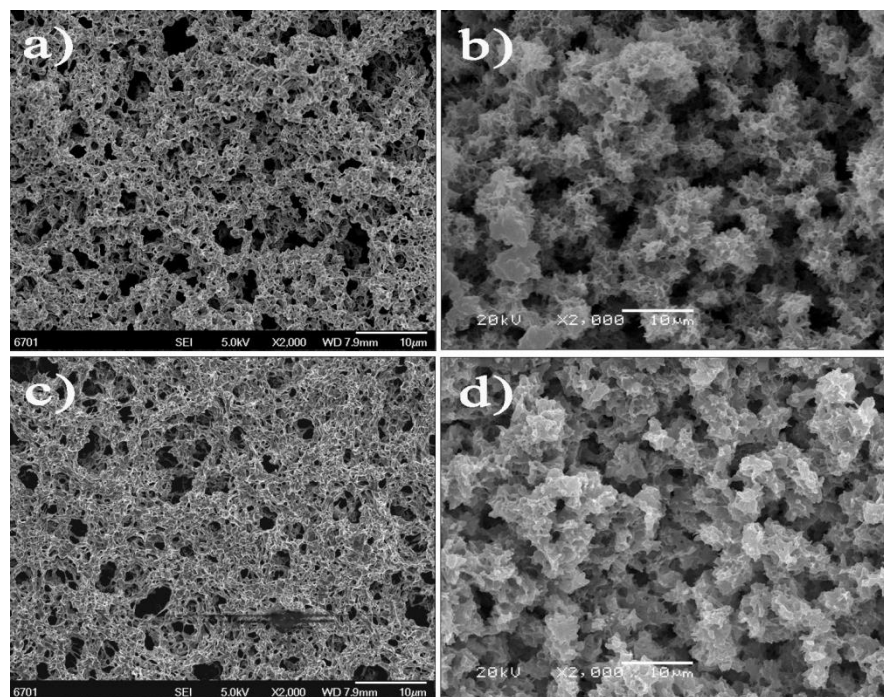
Figure S2. FTIR spectrum of the copolymer P (MMA-AA).



**Figure S3.** the thickness changes of PVDF, PVDF-F127, PVDF-F127-P (MMA-AA) membranes via heating treatment. ( membrane before heating treatment, membrane before heating treatment).



**Figure S4.** (a,b) surface and cross sectional structure images of the PVDF-F127 membrane. (c,d) surface and cross sectional structure images of the PVDF-F127 membrane after heating treatment.



**Figure S5.** (a,b) surface and cross sectional structure images of the PVDF-F127-P (MMA-AA) membrane. (c,d) surface and cross sectional structure images of the PVDF-F127-P (MMA-AA) membrane after heating treatment.